

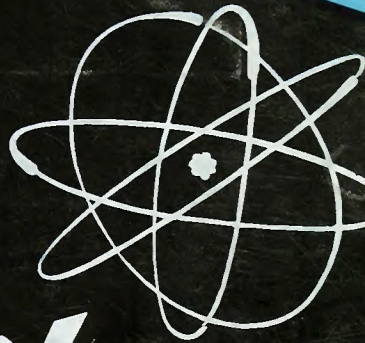
North Carolina State Library  
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N. C.  
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MODERN

SCIENCE

INDUSTRY



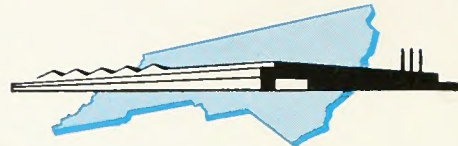
DYNAMIC DEVELOPMENT  
IN FORWARD-LOOKING

**NORTH CAROLINA**





THIS  
GOVERNOR  
SPEAKS  
INDUSTRY'S  
LANGUAGE



— he is the State's No. 1 salesman of

**NORTH CAROLINA**

advantages for new and expanding industry.

With an outstanding two-year record, and going into a full four-year term backed by a tremendous vote of confidence, Governor Luther H. Hodges' business-like administration is prepared to follow through its policies of friendly cooperation with industry locating and expanding in North Carolina.

Governor Hodges knows industry's problems from his own thirty-year career in business, spanning a rise from mill hand to managing head in charge of manufacturing and sales for the textile plants of Marshall Field & Company, with a multi-million dollar volume.

The experience and energy of Governor Hodges is being applied throughout State Government. His leadership is attracting the support and participation of other successful North Carolina business men in maintaining and improving the favorable industrial climate of North Carolina.

The Governor's Research Triangle Development Council is working on a program to make full use of the research facilities in the geographic area which includes N. C. State College, Duke University and the University of North Carolina—all within a 25-mile radius.

Establishment of more vocational training schools to increase the numbers of skilled workers in North Carolina's vast labor pool has the active support of Governor Hodges.

This business-conscious administration is building a bright future for industry in North Carolina—the State which already has a record of outstanding success stories in American Business.

Information about industrial opportunities in the State is contained in an editorial survey, "North Carolina's Secret Weapon". A copy will be sent promptly upon request to Governor Luther H. Hodges or to William P. Saunders, Director of the Department of Conservation and Development, Raleigh 4—

**NORTH CAROLINA**

YEAR 'ROUND MID-SOUTH



North Carolina's

# MODERN SCIENCE INDUSTRY

*Published at the direction of*

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1957

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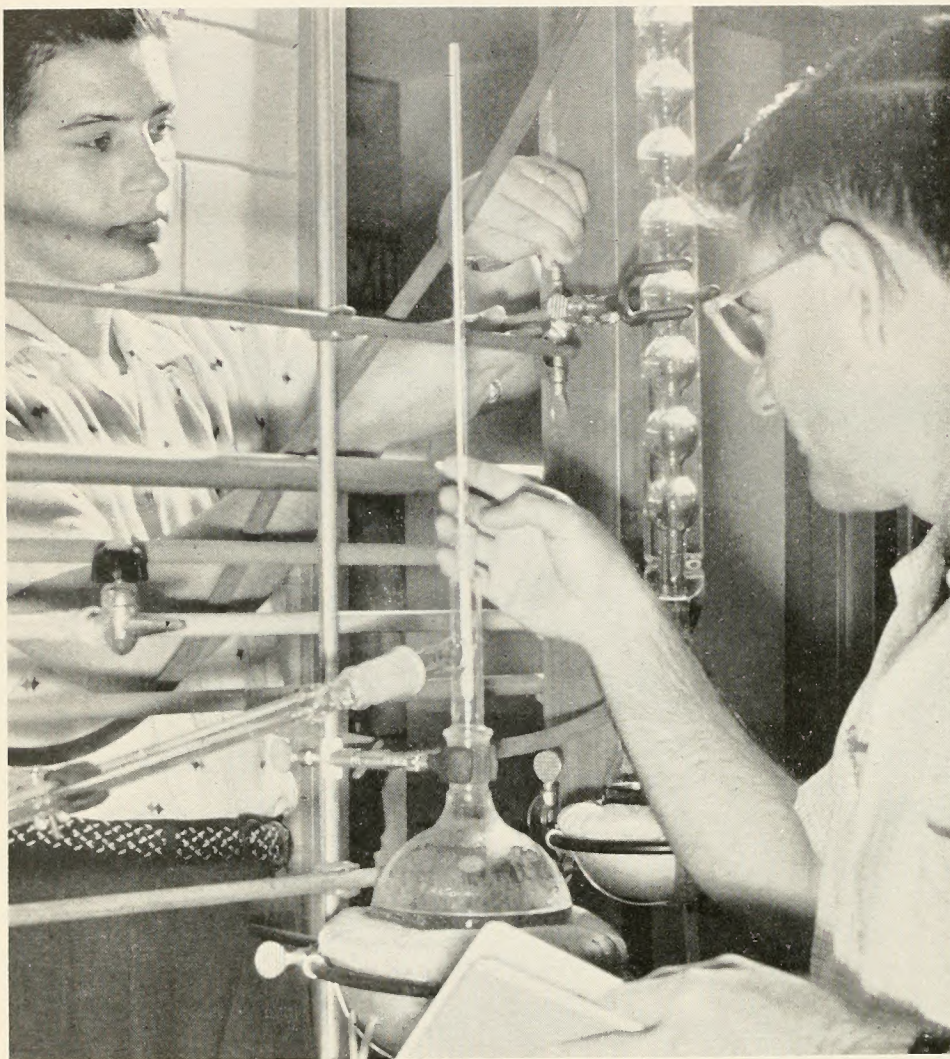
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*In new research center of American Enka Corporation near Asheville time, temperature and reagent tests are translated directly into production of synthetic fibers.*





# Industrial Research in North Carolina

In North Carolina today scientific research is the outstanding industrial development.

Long the South's leading industrial state—because of such natural assets as easily trained workmen, mild climate, pure water and accessibility to markets and materials—North Carolina is now forging ahead as the industrial center of the South Atlantic.

New ideas for tomorrow's products—and facilities for research leading to improvements in today's products and processes—are among the tangible benefits now available to industry domiciled in this mid-South commonwealth.

It is difficult to draw the line, between private industrial research, cooperative research in which both industry and educational institutions take part, and research of industrial significance undertaken by the institutions themselves.

Research personnel of educational institutions and engineers

and scientists on the staffs of the many industrial laboratories to be found in the State are working together on a large number of projects. And in many cases the industries help to support the institutional efforts. For instance, among those who work with and support the special and basic projects of the institute of statistics of the University of North Carolina are Westinghouse, Esso Standard Oil, Burlington Industries, Union Carbide and Carbon, and the United States Navy and Air Force. Yet all have their own research programs.

## Area of Research

Governor Hodges described the situation in a talk he made at the dedication of the Raleigh Engineering Laboratory of the American Machine and Foundry Company in May, 1956.

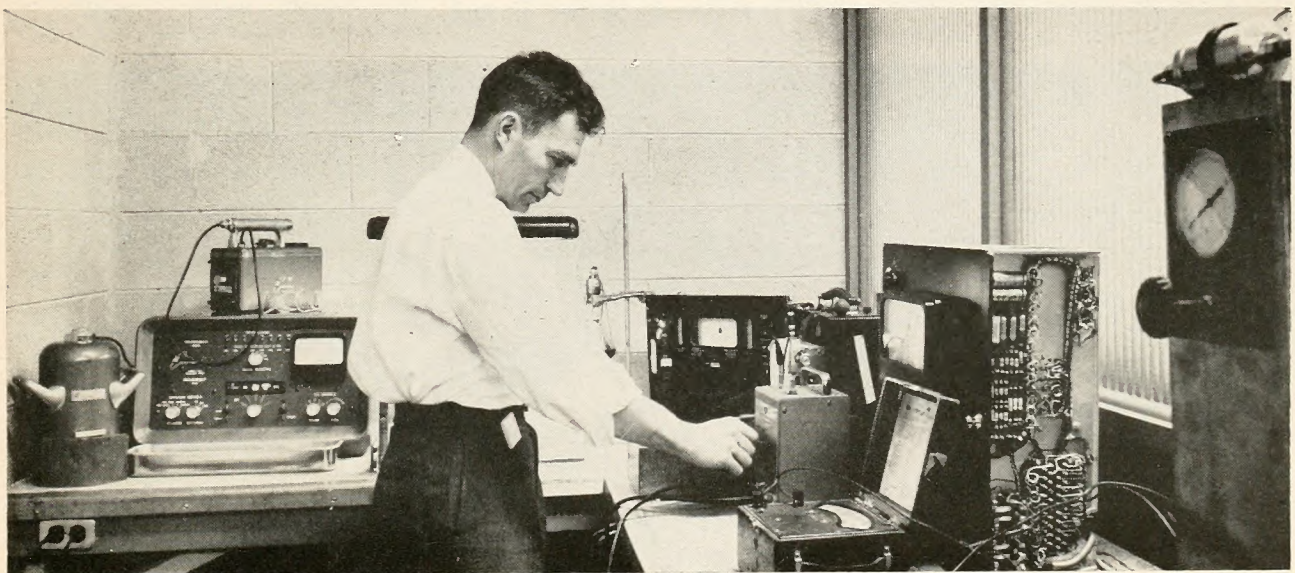
"At few locations in the United States, and indeed in the world, can there be found an area so favorable for a research seminar atmosphere, and so ac-

cessible to advisory talents, instruments and devices for performing effectively in the field of research," the Governor stated.

In that same talk North Carolina's industrialist Governor pictured the new Tar Heel approach to industrialization in these words:

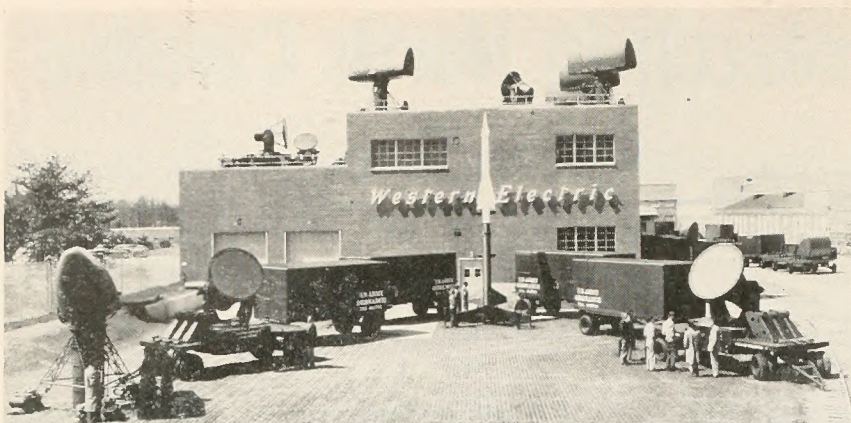
"Our Research Triangle in the surrounding area provides a unique cultural environment. In addition to the specialization and scientific engineering research training, there are several liberal arts colleges, good high school facilities and a variety of recreational and cultural offerings. Air lines, railroads and highway transportation merge at this intermediate point between the North and South. Commuting between the triangle cities is a matter of thirty minutes, and from the suburban to downtown areas and shopping centers they are only about ten or fifteen minutes' travel. . .

"We welcome new industry



One of the newest industrial laboratories to locate in North Carolina is American Machine and Foundry's unit at Raleigh. Here a physicist sets up an experiment.





This picture shows one reason why North Carolina is placing so much emphasis on scientific development. Nike missile in the center is made in the State by Douglas Aircraft. Radar guidance apparatus is made in several North Carolina plants by Western Electric.

and are well aware of what it means to a community when a factory or plant moves in; and we are always happy when one of our friends here makes progress."

### Research By Industry

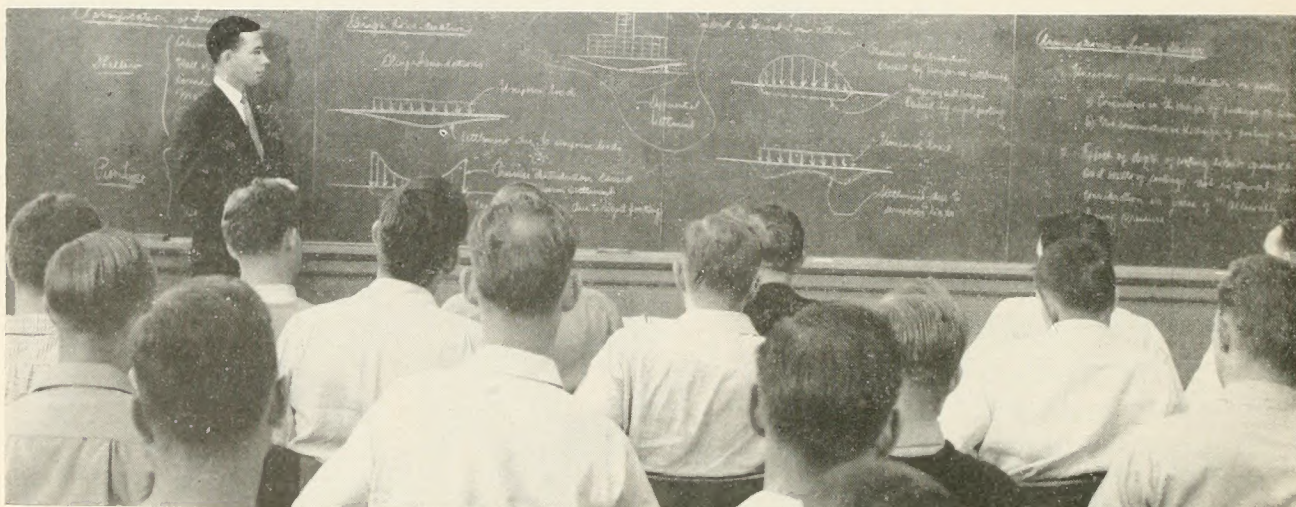
Any attempt even to list the industrial research projects now under way in North Carolina would be both futile and dangerous. It would be futile because for obvious reasons many industries are working on projects which they are not ready to announce. It would be dangerous because there is so much research now going on that many inad-

vertent omissions would be inevitable. Few scientists and engineers show anything like a lively interest in publicity. But to name just a few industries which are conducting their own research in North Carolina — both in their own laboratories and in cooperation with the institutions of the Research Triangle—would give at least some idea of the scope of such work now in progress.

The big tobacco companies—including R. J. Reynolds, Liggett and Myers, American, and P. Lorillard — are all engaged in various forms of research and

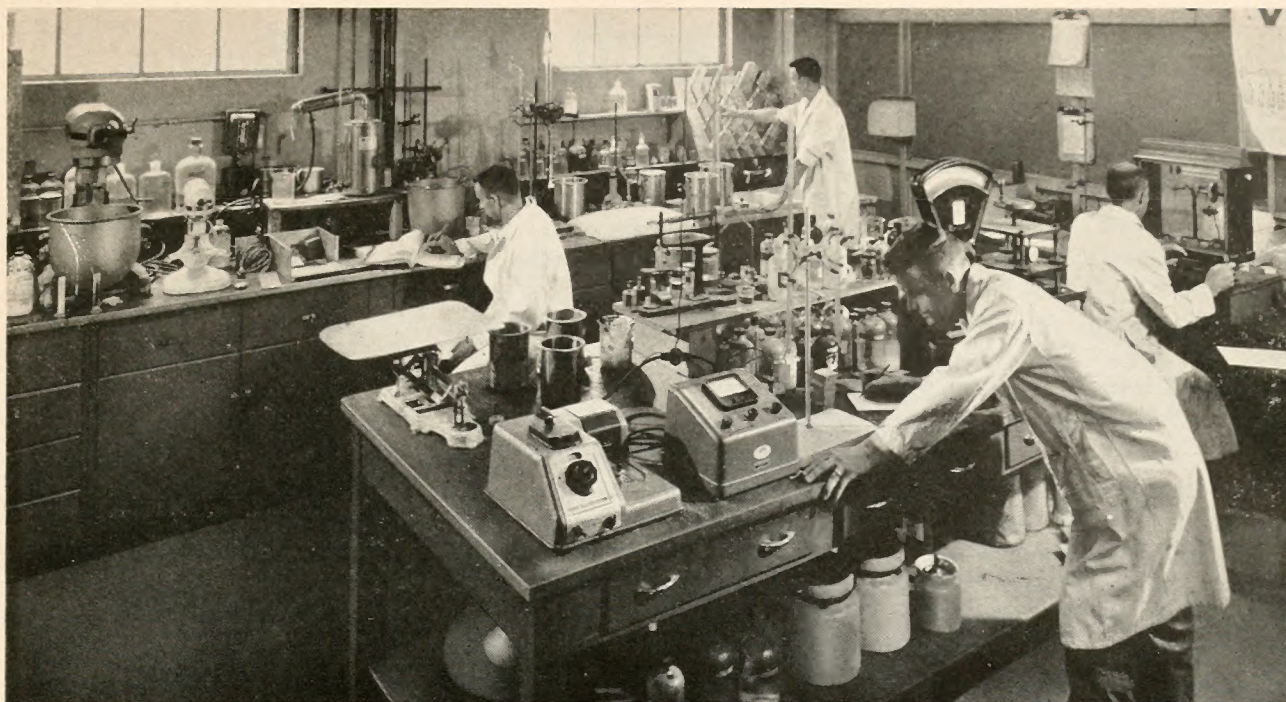
have in North Carolina the best equipped laboratories for their work to be found in the world. In the field of electronics Western Electric and Westinghouse, as well as several smaller electronic industries, are carrying on their own scientific research within the State. American Machine and Foundry, mentioned previously, is just one of the concerns conducting research in its particular field here in the Tar Heel State. Others include the Terrell Machine Company, the Edwards Machine Company and the Wright Machinery Company. And there are many others.

Burlington Industries, international in its manufacture of textiles, has its main research laboratories here in its native State. The Celanese Corporation of America has installed at Charlotte what is perhaps the most complete textile development laboratories ever attached to a marketing operation. The Olin Mathieson Chemical Corporation conducts in North Carolina the research and development activities of the paper division of and the development of new the Ecusta Paper Corporation



Scientific and technical education programs are being stepped up at institutions throughout North Carolina. Above Dr. Ralph E. Fadum lectures to a group of engineering students at N. C. State College.





In this laboratory Dayton Rubber products are given rigid tests for uniformity and quality. Highly skilled technicians, seeking ways to improve present products, are constantly entering new fields in the never-ending process of research and development. In this laboratory many of today's ideas will be started on their way to becoming the products of tomorrow.

at Pisgah Forest. The American Enka Corporation recently opened a new two million dollar research center at Enka—a few miles from Asheville. Enka's 50,000 volt electronic microscope holds a unique place among the large variety of special aids and equipment available for research activity there.

The E. I. duPont de Nemours and Company is engaged in chemical research at its Kinston plant. The Champion Paper and Fibre Company operates laboratories at its huge plant at Canton. Tomorrow's products are being sought by the chemists and technicians in the laboratory of the Dayton Rubber Company plant at Waynesville. Cannon, Cone, and Chatham mills are three native Tar Heel industries which are as concerned in modern, scientific research as any newcomer to the State. The work each is doing on the elimination of waste, improvement of fibers

products is outstanding.

#### **Research By Organizations**

In North Carolina industrial organizations and groups of manufacturers promote and finance a great deal of the research being carried on at the three triangle institutions. Among these are the Southern Furniture Manufacturers Association, the Brick and Tile Service, Inc., the Dairy Foundation, the Textile Foundation and others.

Projects in operation by the State College Industrial Experimental program include those undertaken for the North State Pyrophyllite Company, the Pomona Terra Cotta Company, Carolina Pyrophyllite Company, the Lithium Company of America, the Hitchcock Corporation and actually scores of others. Through this program State College operates laboratories and pilot plants both on the campus at Raleigh and at Asheville, in Western North Carolina where

there are a multitude of ceramic raw products available. Dr. William C. Bell, a veteran member of the State College Engineering faculty, is head of the Industrial Experimental program. In addition to his own staff he has available as consultants all the engineers and scientists of the various State College schools. This program has proved of immense value, especially to those smaller industries which do not have their own research facilities.

Two recent additions to the triangle research laboratories are the Pulp and Paper Technology laboratory and the Agricultural Engineering Building at State College. Wood product industries offer some of the most promising opportunities for industrial development available in the State. And North Carolina now realizes that agriculture, like industry, needs the brains and know-how of skilled engineers.



# The Research Triangle

North Carolina has a special, and in certain way, unique resource for the development of industry based on science. This is the Research Triangle.

The Research Triangle consists of Duke University, the University of North Carolina, and North Carolina State College.

The name "Research Triangle" was adopted because the three institutions concerned are located in a small triangular area in the heart of North Carolina. From a point in the center of this triangle it is no more than 15 miles to any one of the institutions. Research personnel on the staffs of the three institutions numbers more than 850. Their interest range from the most abstract mathematical formulations to the immediate and practical problems of the manufacturer and the farmer.

The Governor's Research Triangle Committee, Inc., has recently been organized to further the research potential of the Triangle area. The Research Triangle Committee is a non-profit, privately supported agency which works with scientists, engineers and educators of Duke University, North Carolina State College and the University of North Carolina at Chapel Hill. It was created under the sponsorship of Governor Luther H. Hodges, but is strictly a private agency. Both President William C. Friday of the University of North Carolina, and President A. Hollis Eden of Duke University are members of the Committee.

Currently more than \$7 million is budgeted for organized research at these institutions. This money comes from the

operational budgets of the three schools, from grants by government and industry, and from contracts with government and industry. The combined library facilities of the triangle institutions number more than two million volumes. And virtually every scientific periodical is available, and listed in a public check list.

Research equipment and facilities of the three include the first independently owned, unclassified nuclear reactor to be built in the nation. Scores of laboratories with the most modern scientific equipment are here. Trained personnel is provided by an increasing number of students majoring in the modern sciences. Here, in this uncrowded area and unhurried atmosphere, already distinguished for its research projects, the staff members of private laboratories and the members of the scientific schools find each other mutually stimulating. Progress is blended with pleasant living.

Haywood C. Smith, manager of the new Raleigh laboratory of the American Machine and Foundry Corporation, put it this way: "Technical people like to associate with other technical people. They like to live and work in a community where there are so many others with kindred interests. Many of our engineers are now taking additional work at State College and Duke University; and we have consulting agreements with members of the faculties of the triangle institutions. In other words, we like it here."

In stating reasons why North Carolina was selected by the Union Carbide and Carbon Corporation for the site of its new establishment for experimental

work on agricultural chemicals, Dr. G. H. Law, vice president said that one of the most important considerations was the proximity of the institutions comprising the North Carolina Research Triangle, recently formally organized by Governor Luther H. Hodges. These include Duke University at Durham, the University of North Carolina at Chapel Hill, and State College.

"This is one of the leading research areas in the country," Dr. Law said, "and being in this environment will be of great inspirational as well as technical value."

The first step in the creation of the Research Triangle was the taking of an inventory by a committee headed by Dean J. Harold Lampe of the School of Engineering at North Carolina State College. Dean Marcus Hobbs of Duke University was chairman of a special committee for this purpose. The inventory covered the resources of the three institutions and the details of field, staff personnel, library resources, special facilities and equipment, and major areas of research activity.

Here briefly are some of the facts the inventory revealed. In a compact area within the center of the State there are two medical schools, a school of dentistry, two engineering schools, two schools of forestry, a school of textiles, a school of agriculture, including an agricultural experiment station, a school of public health, a school of business administration, an institute of statistics in which is located the world's highest concentration of professional research statisticians, an institute of government, and a number of other



specialized and professional schools and institutes. In this small area are located three outstanding libraries containing more than two million volumes and scientific journals and covering almost every field of research. Professional staff and research specialists in selected fields at these institutions, already numbering more than 850, are increasing.

This concentration of research people and facilities is unique in the South. The triangle was not planned. The schools developed separately as educational institutions. Actually, the Research Triangle merely crystallizes the past growth and present excellence of the three institutions that have grown up so close together.

The president of the Governor's Research Triangle Committee, Inc. is Robert M. Hanes of Winston-Salem, former president of the American Bankers Association and now honorary chairman of the board of the Wachovia Bank and Trust Company. The vice president is Dr. Hollis Eden, president of Duke University. The secretary and treasurer is Brandon Hodges, of the Champion Paper and Fiber Company of Canton. Other members of the board of directors are Governor Hodges, William H. Ruffin of Durham who is a former president of the National Association of Manufacturers; Robert Armstrong of Charlotte, who is with the Celanese Corporation; E. Y. Floyd of Raleigh, who is director of the North Carolina Plant Food Institute; President William C. Friday of the University of North Carolina; Grady Rankin of Gastonia, who has been active in both electric power and textile manufacturing; and C. W. Reynolds of Winston-Salem plant of Western Electric. The executive director of the Triangle is Dr. George L.

Simpson, Jr., on leave from the University's Institute for Research in Social Science at Chapel Hill. He is in charge of the Triangle's office in Raleigh.

Within the Triangle there are several hundred research projects now in progress. Many of them have been undertaken for industry on a contract basis, while others were undertaken at the request of the United States Government. The industries benefiting from Triangle Research include some of the largest to be found in America. But small industry gets equal aid. Among the "clients" of the industrial experimental program at State College are scores of new, small industrial enterprises. The little man with a big idea has found the technical assistance which modern industrial success demands.

Among the scientists and engineers connected with the Research Triangle institutions are nationally and internationally known men who have received top honors in their fields.

In a recently published brochure, Director Simpson described the Governor's Research Triangle Committee in these words:

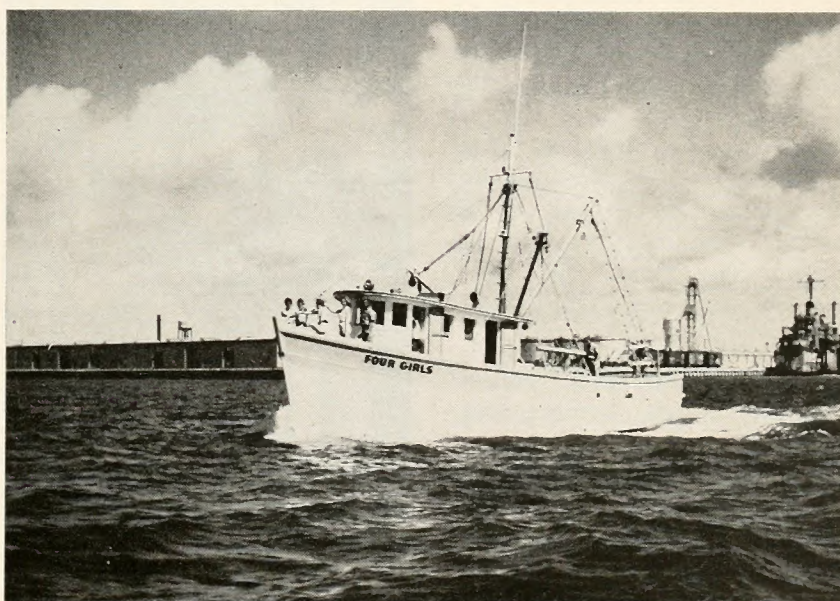
"The Governor's Research Triangle Committee, Inc., is a non-stock, non-profit organization whose purpose is to do all that is possible to use and develop the research resources of the triangle area.

"The Committee works solely within the bounds and desires of the three institutions. Its primary purpose is to make industrial governmental research activities aware of the scientific resources and cultural advantages of the triangle area.

"When asked, the Committee will undertake to arrange a meeting between such institutional and governmental agencies and appropriate people from the three institutions.

"The Committee undertakes also to help in carrying forward any projects deemed desirable by one or more of the institutions."

And in another paragraph of the same brochure, Dr. Simpson made this statement: "North Carolina, the largest industrial state in the South, is now ready for the second great stage in her industrial development, and to take the lead in supplying the research core for the region."



North Carolina-built trawlers, like the one above, fish from the North Atlantic to the Gulf of Mexico.



# Atomic Energy For Industry

In North Carolina a number of scientists on the staffs of the State's largest educational institutions, and others employed by private industry within the State, are busy with problems of atomic energy for industry.

The first college-owned nuclear reactor in the country was built at North Carolina State College in Raleigh. The first Ph.D. degree in the field of nuclear physics was granted by N. C. State. Nearly two hundred other young scientists have earned their Bachelor's and Master's degrees in the same subject. Some of these State College alumni have entered government service while others are doing research for industry.

Dr. A. C. Menius, acting head of the Physics Department, and Dr. Raymond L. Murray direct the work at the State College reactor. The reactor itself cost \$630,000—of which Burlington Industries contributed \$200,000.

More than 7,000 visitors have gazed at the reactor—or, rather, at the huge housing for the 4-gallon stainless steel cylinder which contains a bubbling uranium solution. Incidentally, this solution is expected to last for 100 years. The housing, which is the shield for this 4-gallon can, weighs more than a half million pounds. It contains, among other things, 200 tons of concrete, 10 tons of graphite and 13 tons of lead.

## Atomic Electric Power

But in North Carolina progress in the use and development of atomic energy is by no means limited to the college campus. Already the great power companies which serve the industries of the State are at work in the field of nuclear fission. For many

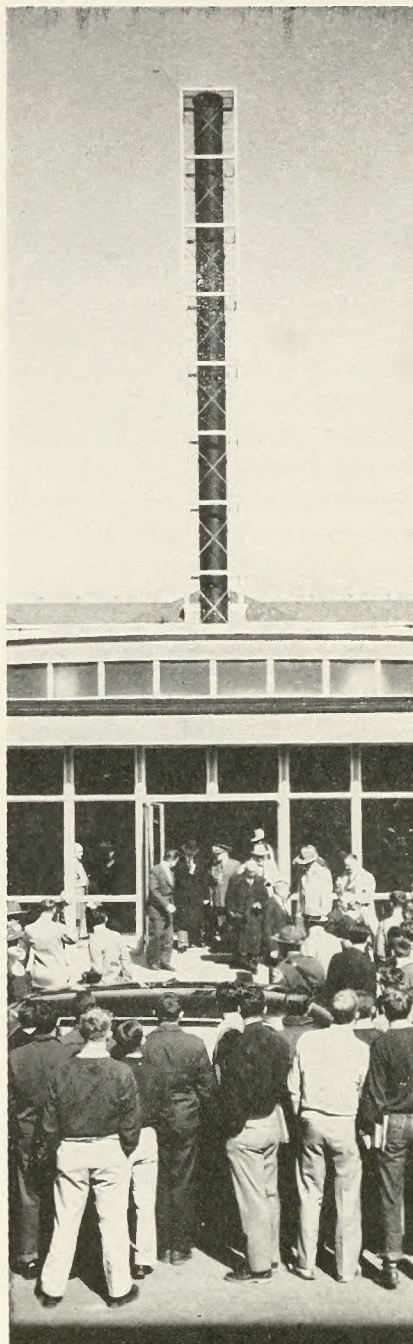
years North Carolina has taken the lead in the development of hydro-electric power. At least some of the power company engineers believe that the State

will be the first to provide its industry with electric power created by atomic energy.

Recently the Carolina Power and Light Company, the Duke Power Company, the Virginia Electric and Power Company and the South Carolina Electric and Gas Company jointly formed the Carolinas Virginia Nuclear Associates, Inc. with Norman A. Cocke of Charlotte as President. The new nuclear power company plans the construction of a jointly owned pilot plant in the near future. The engineers and scientists employed by the new corporation, those employed by the four parent electric power companies, and the atomic energy experts of State College and the other triangle universities will cooperate in the atomic power project.

Every industry in North Carolina—in fact, every citizen of the State—is vitally concerned with this new, cooperative development.

In the late summer of 1956 the Southern Governors Conference, meeting at White Sulphur Springs, West Virginia, did two things which were of especial interest to North Carolina's atomic scientists. The governors decided to organize a network of committees throughout the South to advance the region's progress in nuclear energy development. And then the governors elected Hodges as their chairman—it being the first time any governor had been so recognized while attending only his second meeting of the Conference. Whether or not Governor Hodges' election resulted from the pioneer role he and his State have played in the development of atomic energy for industry, the scientists like



Nuclear reactor at North Carolina State College in Raleigh has attracted international attention. This photograph was made during a visit by the President of Turkey.

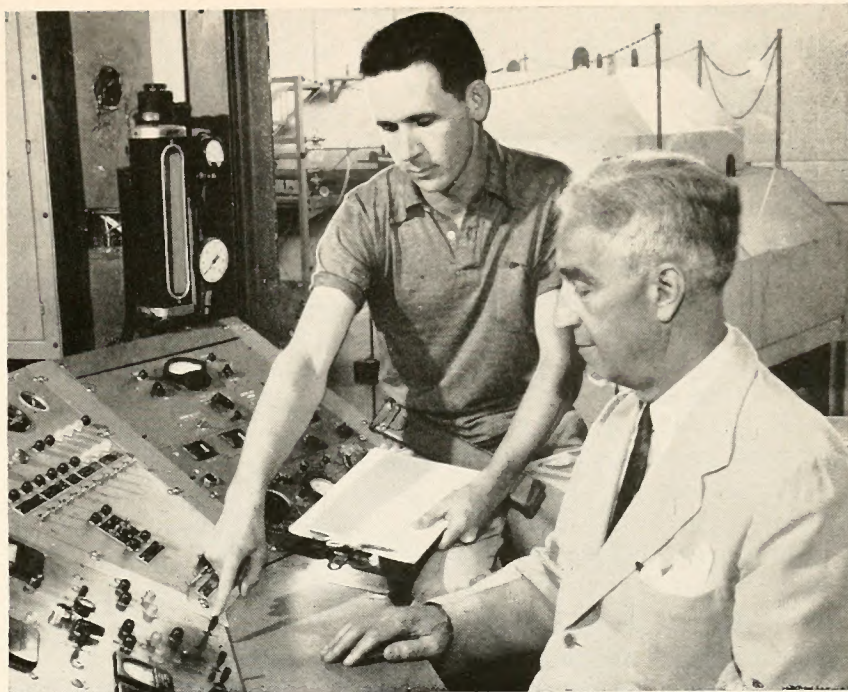


to think so. And they were pleased with the Governor's statement, made after his election, in which he stressed the importance of developing scientists and bodies of scientific knowledge throughout the South.

The research laboratory of several North Carolina industries are engaged in atomic research to some degree. There is, for example the new research center of the American Enka Corporation near Asheville. The center includes a modern radio-isotope tracer laboratory where samples of synthetics are treated with "live" elements so studies can be made as production material is subjected to practical applications and further research treatments.

North Carolina's industrial scientists are not the only ones vitally interested in the work being done at the State College Nuclear Reactor. Within a few miles of the college are three medical schools, each connected with a large hospital, and each engaged in scientific research as well as teaching. These are the Duke Medical School and the Duke Hospital at Durham, the University of North Carolina Medical School and the University Memorial Hospital at Chapel Hill, and the Bowman Gray Medical School and the Baptist Hospital, both connected with Wake Forest College, at Winston-Salem.

It may be stretching a point to contend that these three medical schools are engaged in what is usually described as "industrial research." But certainly they are engaged in medical research. And certainly health, like atomic energy, is of the utmost importance to industry.



Brandon Hodges (right)—secretary of The Governor's Research Triangle Committee, Inc.,—sits at the control panel of the nuclear reactor at N. C. State College while a student describes the operation. The reactor is the first such unit in the nation built outside AEC jurisdiction.

## Training Craftsmen

Rule No. 1 of North Carolina's industrial development program was and is: "Find the facts; then face 'em." And of course all the facts which the survey found were not pleasant. One unpleasant fact was the scarcity of skilled craftsmen — except in certain fields.

The cause of this condition was easy to understand. As the first southern state to develop industrially, North Carolina turned first to manufacturing the raw materials produced on its own farms and in its own forest. It became the center of tobacco, textile and wooden furniture manufacturing. But the State's success in these industrial fields for a time actually slowed progress in others. Industrially speaking, North Carolina became a "three crop State."

Recently considerable research at the University of North Caro-

lina proved what most Tar Heels already suspected. When a state depends upon two or three industries for the overwhelming proportion of its industrial employment it is living dangerously. When a state has a surplus of manpower in agriculture — and North Carolina has more people on farms than any other state — it needs a variety of interest in which these people may seek employment. Here, in part, is what the University experts had to say on the subject:

"The State's major resource in industrial competition at present is clearly in the large numbers of potential industrial employees now engaged full time or part time in agriculture. Per capita income is low in agriculture; and it is likely that labor will leave the farm at whatever rate it is needed by industry. Indeed, the annual out-migration of people going primarily to



non-agricultural employment in other states is evidence that the pressure to leave the farm is compelling. . .

"There is general agreement that a profitable agriculture in North Carolina, in most areas, requires the movement out of agriculture of many thousands of farmers and the consolidation of many farmers into large family units.

"It would seem, therefore, that on the basis of present information the State's greatest opportunity lies in the development of this potential labor supply into a *trained* labor supply. . . ."

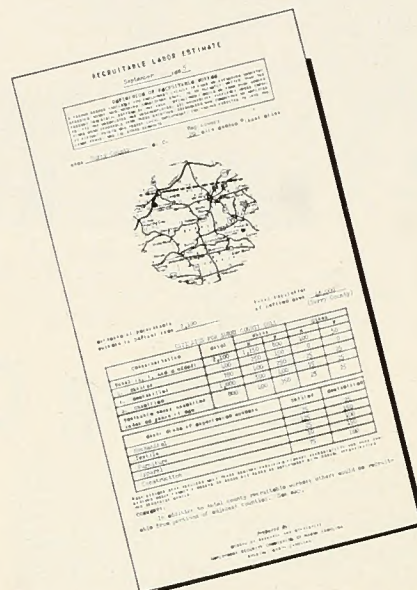
### Trained Technicians

On the basis of this and other studies, the State is acting. The State College Development Council instituted a program for supplying just this type of technical education. Modern industry requires about six trained technicians to keep up with one engineer. Already in operation is the Gastonia Technical Institute. This school, now operated by N. C. State College, gives a one-year technical course designed to prepare technicians for industry. Six other schools are planned. They will be scattered throughout the State—the specific location being Western North Carolina, the Southern Piedmont, the Northwestern Piedmont, Central North Carolina, Eastern North Carolina and Southeastern North Carolina.

The State College Industrial Education staff has conferred with management of many industries — particularly those in electronics — and has set up twenty-three new training programs in existing schools on such subjects as electronics, machine shop, practices, supervision, drafting, etc.

In addition to the State's own effort to develop the technical potentiality of native Tar Heels,

many industries are conducting training courses of their own. A personnel executive of Western Electric, which has three plants in North Carolina, said publicly that nowhere in the country had he found men and women as adaptable to training as he had in this State. This man has worked with Western Electric employees in many eastern and northern states. Similar statements have been made by executives of Westinghouse, du-



This data sheet, greatly reduced, shows type of detailed data on available labor resources which is supplied by the N. C. Employment Security Commission. Special surveys are made to meet needs of incoming industries.

Pont and other industries which have been more than pleased with the adaptability of Tar Heel workers after establishing plants in North Carolina.

### Graduate Engineers

As far as trained engineers are concerned, there are some 2,000 recent engineering graduates of North Carolina universities, employed mostly out of the State at present. All of these are excellent prospective employees, because experience has shown that they will return to their native state when there is active opportunity to employ their skills and professions at

home. That is the way native North Carolinians feel about their State. That also is the way that *new* North Carolinians feel about it, once they locate in "the most livable State in America."

The North Carolina Department of Labor is prepared to assist industry in organizing apprenticeship training programs in the skilled trades.

The division of apprenticeship training has a well organized field staff which is ready to furnish speedy and efficient service to any industry wishing to move into the State.

Working under the general direction of the State Apprenticeship Council, the division assists in the organization of apprenticeship training programs based upon voluntary participation by industry. The basic standards of training of the division recognized by the Federal Bureau of Apprenticeship as being comparable with the Federal Standards on Apprenticeship training.

The programs which the division assists in organizing and servicing offer the skilled trades, which require two or more years of apprenticeship training in order for the apprentice to become a fully qualified journeyman or skilled mechanic. All apprentices receive on-the-job training, supplemented by technical instruction furnished by the Division of Vocational Education. The division is manned by a trained staff which will assist in establishing skilled improvement programs for production workers for the benefit of industries whose primary need is a large number of qualified production employees.

To the executive seeking a site for a new plant, the significance of this program is that North Carolinians are constantly studying means for improving their knowledge and their skills.



# The Quality of Tar Heel Labor

Who says that native North Carolinians take to modern industrial training like ducks to water? Does this "testimonial" come from the Tar Heels themselves or from the industrial newcomers who already have tried them out?

Both!

But at this point let's silence the natives — if possible — and hear only from some industrialists who already have moved in to the State.

The Westinghouse Meter Plant started operations in Raleigh in 1953. In less than two years the millionth meter was produced. Plant manager J. A. Babcock had this to say about his company's record:

"Frankly this production record is somewhat remarkable in view of the fact that the majority of our employees had never before worked in industry. Their ability to adapt to training in learning industrial skills has been a highly rewarding experience to all concerned."

*"When we first moved to North Carolina, we brought with us only a limited number of key people, less than 10% of the expected force, as a nucleus upon which to build," stated F. E. Henderson, manager of Western Electric at Winston-Salem. "We had to hire several thousand local people and we found that they could be easily trained, that they adapted themselves readily to changed work habits and practices and they rapidly developed into a very efficient work force."*

"We are proud of our present operations," is the statement of John O. DeVreis, plant manager of the General Electric Company at Asheboro. "Our success in establishing a new plant was largely due to the willingness and efficiency shown by our new employees in accepting and carrying out new assignments, and the cooperation of the people in our town, community and State."

From Ottis S. Marshall, of the Sylvania Electric Products, Inc. plant at High Point, came these words: "The success of our operation has been due in large measure to the high degree of professional skill that our employees are able to offer us. North Carolina is one of the industrial centers of the country where art has been combined with pride of profession to produce a product of superior quality. For the beauty and craftsmanship of Sylvania Television cabinets we must thank those employees in North Carolina with a high degree of skill who, by their own initiative, have reached the top of their profession. Moreover, we have found our employees to be very loyal and possessing an independence that places them on a very high level."

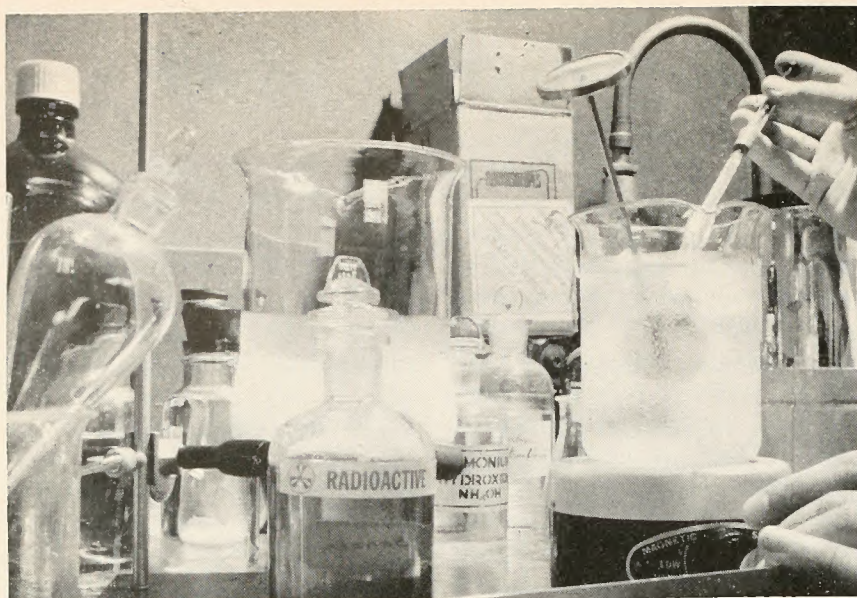
"We of Douglas found numerous economic and sight location advantages in our move to Charlotte," stated Sheldon P. Smith of the Douglas Aircraft Company. "It is a completely new home to many of our personnel and they have found in the church, in the home, the arts and in recreation, education and medicine an appreciative and progressive spirit that makes a community a home indeed. As new citizens, we think of Charlotte not merely as a place to live in order to do successful work but rather as a place where we shall work in order to do successful living."

"One of the strongest factors leading to the duPont decision in 1950 to locate the world's first dacron polyester fiber in Kinston was people," wrote W. E. Gladding, plant manager of



North Carolina female labor is highly adaptable to precise manufacturing operation. At left, production worker assembles miniature electronic component in Kearfott Company at Black Mountain. At right, technician checks silver plating in Gorham's Asheville plant.





Small drops of liquid unveil great stories of research information to this American Enka research scientist. The modern Radioisotope Tracer Laboratory is located in the new American Enka Research Center building. Here samples of synthetics are treated with "live" elements so studies can be made as production material is subjected to practical applications and further research treatment.

*the E. I. duPont deNemours Company. "Naturally every other aspect of industrial interest was critically evaluated — some 85 in all — but the caliber of employees was a prime consideration. Employee morale is high, productivity is increasing and the low turnover in the work force indicates stability in the employees. Added to this is the pride the new duPont people*

*have taken in their jobs and their expressed satisfaction with company benefits and working conditions."*

"We have found in North Carolina a very fertile field for industrial expansion and now have two plants here," said C. E. Blass, plant manager for Talon, Inc. at Woodland. "The area is full of intelligent, capa-

ble potential employees—housewives relieved of onerous tasks by modern appliances, farmers released from chores by mechanization—eager to secure industrial work. The State Employment Security Commission has made available a very complete and effective battery of tests for each one of our operations. The correlation of such tests with our actual production performance has been very high."

"Our industrial experience in North Carolina has worked out exceedingly well," stated John W. Bowman, vice-president and treasurer of the Berkshire Knitting Mills of Reading, Pa. "We located near Andrews in 1951 with a brand new industry, so far as the local folks were concerned. Training workers in the skills necessary to the manufacturing of quality hosiery requires people of unusual adaptability—and we found them in North Carolina. The full cooperation of State and local authorities was a prime requisite for successful operation in a new location. We found this in abundance in North Carolina. Good roads between key points, are



From the Smoky Mountains in the West to the Atlantic Ocean on the East, North Carolina abounds in vacation opportunities. At left, a family picnics near Roan Mountain.



part, too, of this State's advantages."

*"We heard so much of the excellent labor in North Carolina that we were certain if the workers were half as good as we had heard, we could make no mistake in locating there," stated Oliver J. Greenway, vice-president of the International Resistance Company of Philadelphia, Pa., which has built two plants in the State. "Our experience has assured us that all that was said about the labor was not one bit exaggerated. They are good healthy people, willing to work and quick to learn."*

William E. Roschen, of the Timme Corporation, made this statement: "We are very pleased with our new plant in Wilmington, N. C. After many months of investigating in several states, Wilmington was decided upon. The county government was most cooperative in making available at reasonable cost, an excellent piece of land which we purchased. They also made available to us the facilities of the city water works, which supplies us with an excellent quality of processed water. Ample male



Typical of many new industries enjoying success in using North Carolina labor is this plant of Fasco Industries, at Fayetteville. This unit manufactures electrical appliances.

and female help of good quality has constantly been available and the training of some 400 of these men and women has gone forward smoothly and without difficulty."

"Native labor has responded quickly to industrial training and proved itself intelligently, cooperatively, versatile and dependable," declared F. Jensen, president of the Southern Screw

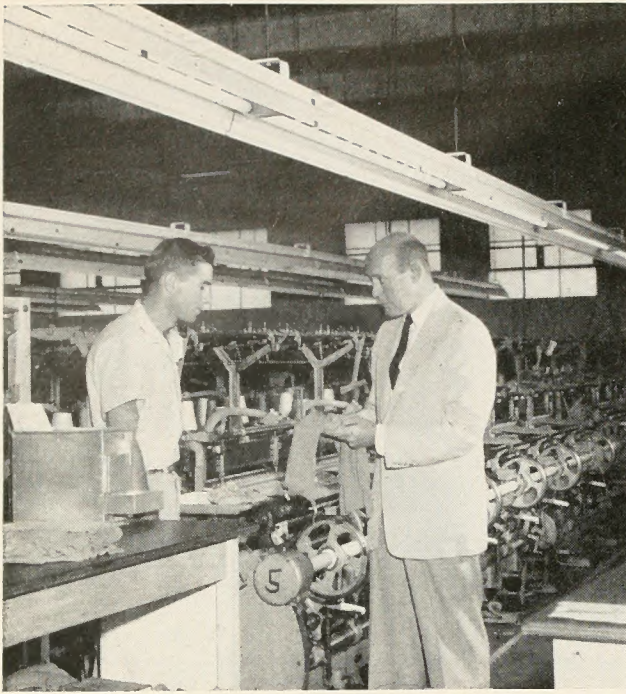
Company which has built a plant at Statesville. "Appreciative of this capacity for training and with the need for a skilled crew in the area, Southern Screw Company began its own training program. Since then, it has been turning unskilled workers into expert mechanics and machinists."

*"The labor here is far superior to any labor I have encount-*



Golf is a year-round sport, featuring such famed courses as those at Pinehurst, left. Summer vacationers throng to a number of North Carolina beaches like the one at the right.



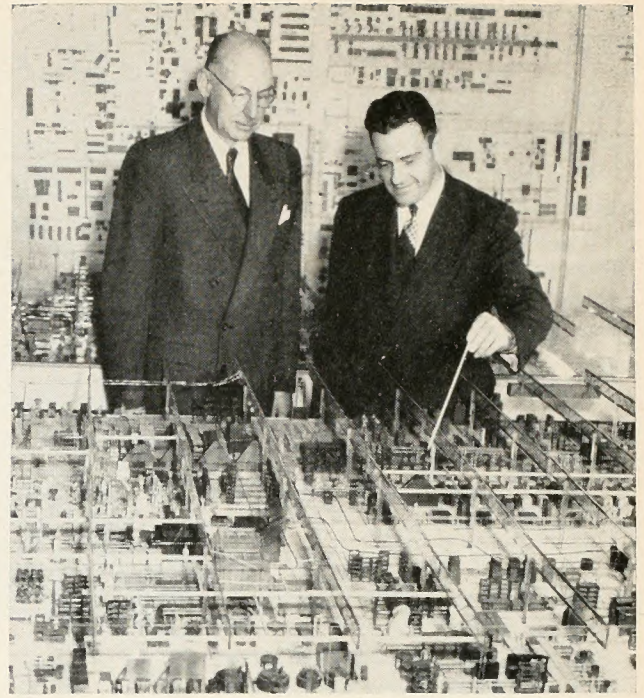


Best salesmen for North Carolina communities today are satisfied "customers" like Richard Haber (right) President of Cashmere Company of America. "Our firm has been greatly pleased with its operation in Asheville and the facilities and environment have proven to be of the highest caliber," he said.

*ered anywhere in this country," declared H. K. Smyth, General Manager of the Saco-Lowell Shops at Sanford. "We started with a handful of trained personnel, brought in untrained workers from the immediate area and made very efficient and productive workers out of them. Local labor is easily trained and above the average intelligence; our absenteeism now averages not more than 3%."*

S. J. Craig, Jr., superintendent of Hatch Mill, Deering Mil-

liken and Company made this statement: "When we began our operation a few years ago, 85% of our employees had never worked in textiles before and most of them had worked only on small farms. Although we have a rather complex textile operation, within a year we were in full production. After four years we are beginning one of the most complex textile operations in the industry today. Great credit for this success must be attributed to the ability,



General Electric, noted for the emphasis it places on community characteristics in locating new plants, has chosen North Carolina for four plants in recent years. Here, officials Harold E. Strong (left) and L. Byron Cherry examine the layout of a new unit at Hendersonville.

willingness and cooperation of our employees during highly, variable and changing processes and procedures. Much credit also must be given to the cooperation and support on the part of local, county and state officials, along with the civic and religious groups."

"Our employees are the ones who are making our plant so successful," wrote R. L. Parrish, factory manager of the Sprague Electric Company at West Jefferson. "The people, mostly of German and Scotch-Irish descent are very friendly, very religious and hard-working. They are good, solid citizens. They are used to hard work and gladly give an employer a fair day's work. Many of them have a natural mechanical bent, which makes it easy for them to learn a new factory job in a short time and become efficient in a new skill. The supply of labor is plentiful, as most of the people live on small farms."



Seizing the opportunity to supply fast-expanding technological activities in the area, Technical Furniture built this new plant at Statesville to manufacture laboratory desks and work benches.



# A Record of Success

An industry which expands or moves into North Carolina is not taking a risk with the unknown. The great opportunities the State offers—including good workmen natural resources, central location and a happy way of life—already have been tried and proven by thousands of other industries, including some of the nation's largest and most modern.

The fact is that North Carolina already is a leading industrial State; yet at the same time it offers industry what is believed to be the largest supply of intelligent and easily trained labor to be found in America today.

How can that be?

The answer lies in North Carolina's unique make-up of family farms, villages, towns and small cities. Though North Carolina is the 10th most populated state in the nation, it does not have a single large city. The

largest, city, Charlotte, had 134,042 population in the 1950 census. The State has the most people living on family farms, but in the immediate vicinity of small cities and towns, of any State in the union. And as agriculture becomes more mechanized, more former farmers are available for full time and part time industrial jobs. But being Tar Heels, they don't want to move to any large industrial city. (To understand fully that statement, the outsider must move into North Carolina and find out for himself why North Carolinians feel that way. There may be words to describe it; but they don't explain it.)

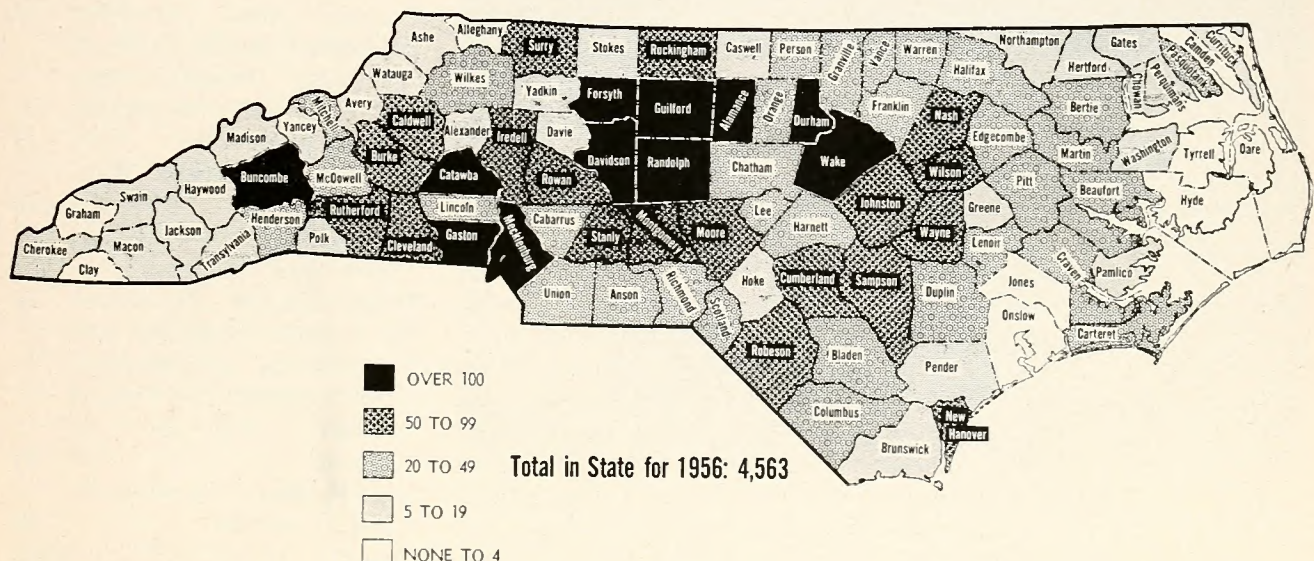
The scientists who made the survey estimated that the State's recruitable labor supply mounts into the hundreds of thousands, including many skilled and semi-skilled workers and an even larger number of trainable men and women under forty-five years of age. There isn't a coun-

ty in the State where potential industrial workers not now in the labor market would not become job seekers should more job opportunities exist. The current study revealed that there are ten counties with a recruitable labor supply of 4,000 or more; thirty-one counties with from 2,000 to 4,000 potential industrial workers; and forty-four counties with from 1,000 to 2,000 such workers. The experts found only fifteen counties where the potential industrial labor supply was less than 1,000.

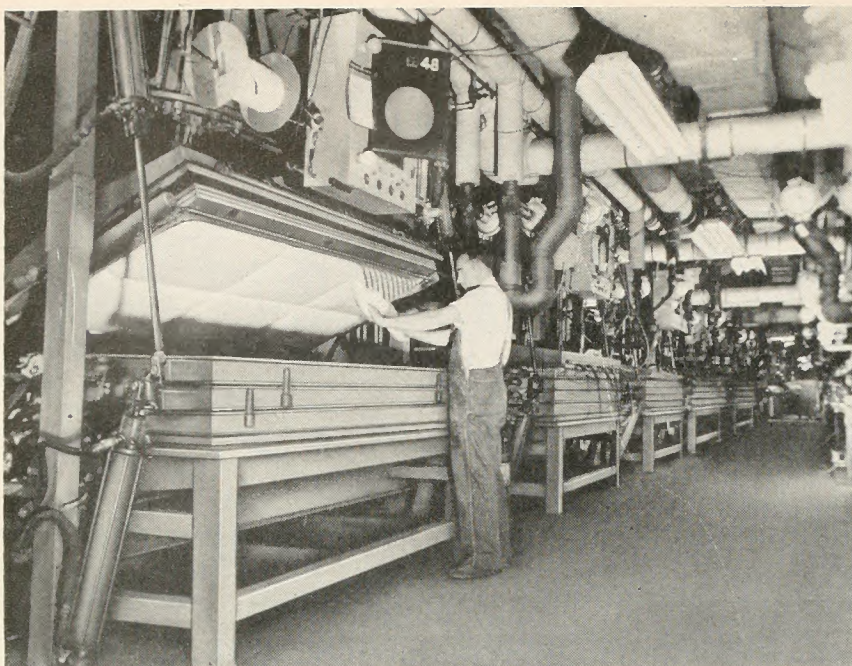
The fact that North Carolina has this huge surplus of trainable labor, plus its rank as the No. 1 industrial state in the Southeast, is another of the "Believe it or Not" assets of the Tar Heel state.

Some industrialists, now highest in their praise of their successful operations in North Carolina, originally approached the question of locating their plants here with frank skepticism.

## DENSITY OF INDUSTRIAL ESTABLISHMENTS IN THE 100 COUNTIES OF NORTH CAROLINA







Removing Dayton Koolfoam Pillow buns and furniture cushioning from molds is one of the typical operations in Dayton Rubber's Waynesville plant. Modern machinery is combined with careful craftsmanship and rigid quality controls in all phases of production.



Excellent transportation was a factor in the location in North Carolina of such plants as this national headquarters for General Electric Outdoor Lighting Division. Products of the Hendersonville plant are shipped throughout the country.

They came, they saw, and they were convinced.

How well the nation's largest industries regard North Carolina is revealed by *Fortune* Magazine.

#### Big Industry

In 1956, as usual, *Fortune* listed the nation's 500 top industrial firms. Sixty-six of these companies operate 170 plants in 84 North Carolina communities

—and many already have plans to expand their North Carolina operations. The 1956 survey by the State Department of Labor classifies 4,609 industries operating in the State. Eleven of the State's 100 counties had more than 100 industries—Guilford with 399 heading the list. Nineteen counties had from 50 to 99 industries; while 32 counties had from 20 to 49 industries. Thirty-

seven of the remaining 38 counties had from 1 to 19 industries—leaving only one county in the entire State with no listed industry.

The best way to appreciate the wide distribution of these 4,609 industries is to look at the accompanying map. But let's consider the variety of products turned out by these manufacturing establishments:

#### MANUFACTURING ESTABLISHMENTS CLASSIFIED BY INDUSTRY

Food and Kindred Products	738
Tobacco Manufacturers & Processors	84
Textile Products	989
Apparel and Other Finished Products Made from Fabrics and Similar Materials	169
Lumber and Wood Products (Except Furniture)	1,157
Furniture and Fixtures	322
Paper and Allied Products	56
Printing, Publishing, and Allied Industries	232
Chemicals and Allied Products	176
Products of Petroleum and Coal	4
Rubber Products	31
Leather and Leather Products	16
Stone, Clay, and Glass Products	208
Primary Metal Industries	30
Fabricated Metal Products (Except Ordnance, Machinery and Transportation Equipment)	95
Machinery (Except Electrical)	166
Electrical Machinery, Equipment, and Supplies	31
Transportation Equipment	28
Professional, Scientific, and Controlling Instruments: Photographic and Optical Goods; Watches and Clocks	24
Miscellaneous Manufacturing Industries	53
<b>GRAND TOTAL</b>	<b>4,609</b>



The fact is that as of the last census North Carolina's total income from manufacturing was \$1,342,000,000 and the State was in the fourteenth place among the 48 in the union.

More and more industries employing skilled labor are opening plants in the Tar Heel State. For instance, during the fiscal year ending in 1955, there was \$44,828,000 invested in North Carolina in industrial plants manufacturing electrical and machine products. That amount was divided among eight new industries which are employing 4,133 people with an annual payroll of \$14,111,000.

### New Investments

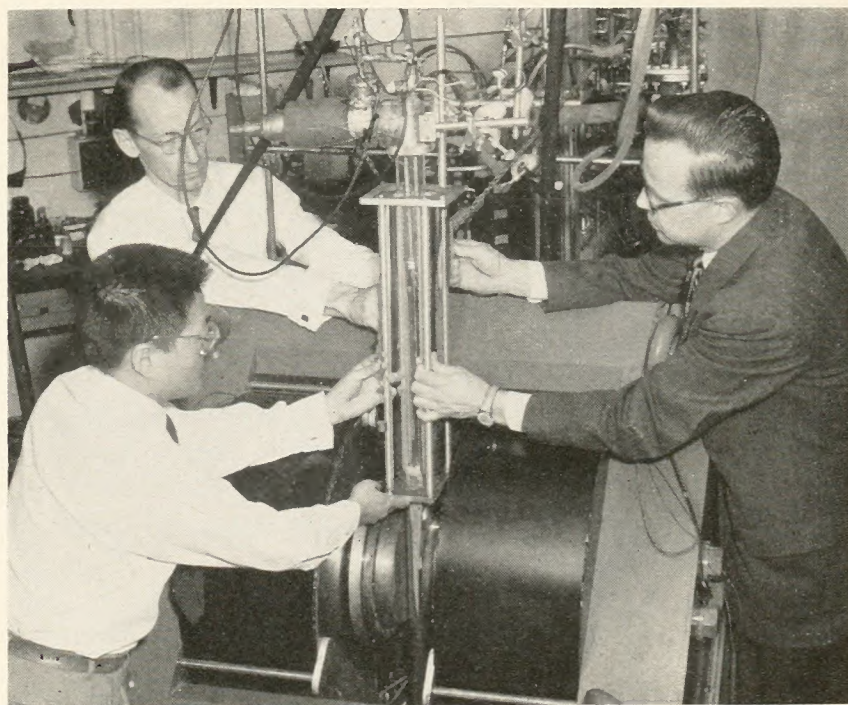
Investments in all new industrial plants and plant expansions in the State during 1956 reached a total of approximately \$163,000,000. The new and expanded plants created some 15,000 new jobs.

During the year 1955, industrial plants manufacturing products in 16 different classifications began operations. The textile plants continued to lead the procession with approximately 26% of the new plants. However, the textile plants accounted for only 16% of the new plant investment; and only about 22% of the potential new employment.

The electronic and electrical machinery industry is assuming an extremely important place in North Carolina economy. In 1940 there were only 66 workers in the State's entire electronics industry. When several recently constructed multi-million dollar plants are in full production, North Carolina's electronic and electrical machinery plants will employ 25,500 persons with an estimated payroll of \$75,500,000. Average employment per plant in this industry in the State is quite high—averaging between 500 and 600 people.

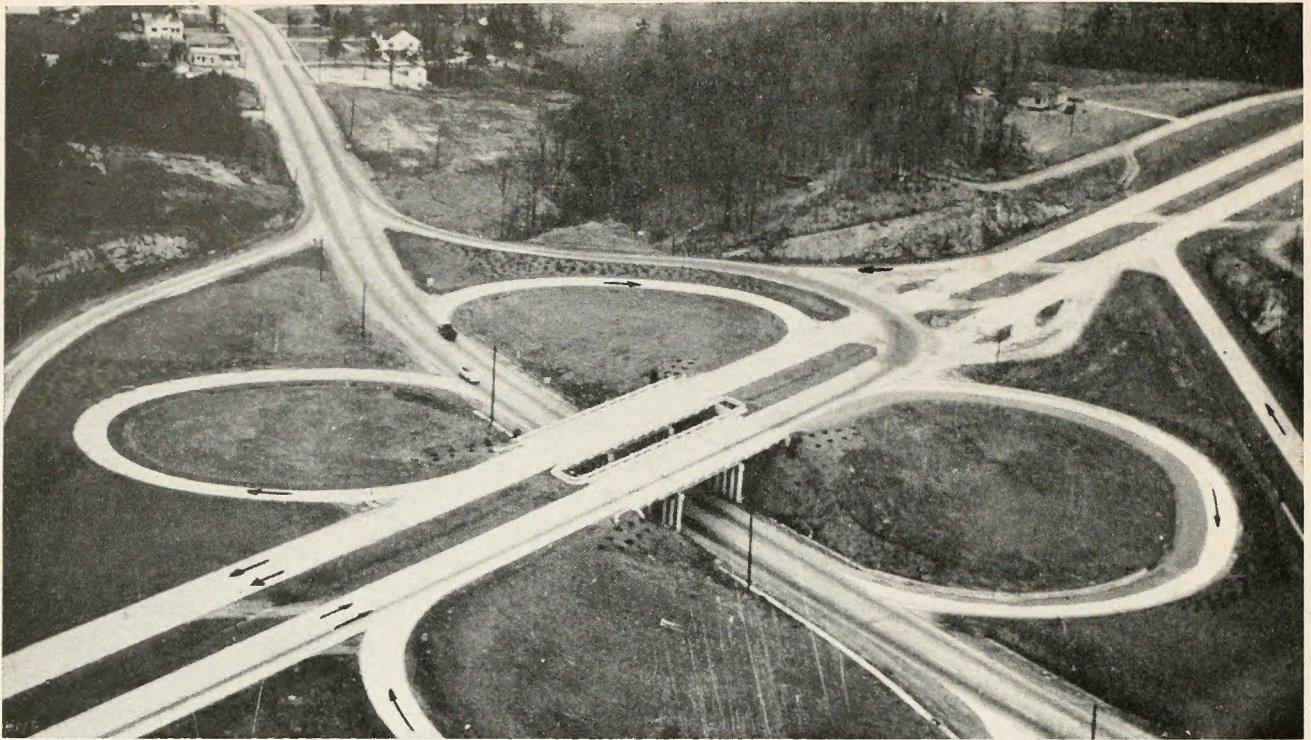


The new Research Center houses American Enka Corporation's most modern research control and development facilities from electron microscope, to isotope tracer laboratories where a new example of vision is seen in North Carolina's industry development program. One production section of American Enka's official trade mark is seen beyond the new building, where more huge plants produce Polymer Synthetics at Enka, near Asheville, North Carolina.



These scientists at Duke University are conducting pioneering research in the field of ultra low temperatures. This equipment makes it possible to achieve temperatures a few hundredths of one degree above absolute zero more easily and quickly than ever before.





Clover leaf and by-pass on one of North Carolina's many dual lane, limited access highways. This one is near Thomasville.

To the industrialist seeking a new plant site, the experience and history of other large plants previously located in the area being studied is of especial importance. The companies which locate one plant in a state do not build others there unless they are satisfied. Over and over again, one plant in North Carolina has been followed by other plants there—built by the same company.

The Western Electric Company, after a relatively modest initial venture in the State, now has manufacturing plants in Burlington, Greensboro and Winston-Salem. About 11,000 people are employed in these plants and, in addition to supplying the Bell Telephone System with complex electronics and communication equipment, the company is conducting experiments and building various devices for the armed forces.

General Electric began in North Carolina with plants at Asheboro, which produces electric blankets, heating pads, and

at Goldsboro, which produces lamp elements. In a two months' period — December 1954 and January 1955—General Electric announced that two more multi-million dollar facilities would be located within the State. The one at Hendersonville consists of an entire division of GE. It manufactures outdoor lighting equipment and serves also as a research, engineering, financial and sales headquarters for the outdoor lighting department. The other new plant, in the Hickory - Newton - Conover area, makes pole-type distribution transformers.

General Electric has an annual payroll in North Carolina of approximately \$10,000,000.

#### **Youth Takes the Lead**

There is an interesting story about General Electric's transformer plant. For it a number of workers were imported from Pittsfield, Mass. Six months before they were transferred, their children began writing "pen-pal" letters to the children of

like age, interest and religion in North Carolina. By the time the new families arrived, the children had formed warm friendships by mail. After arrival in North Carolina, the children were the means by which the newcomers became acquainted with their new neighbors. The transfer is said to have been one of the most pleasant and efficient ever made by General Electric personnel.

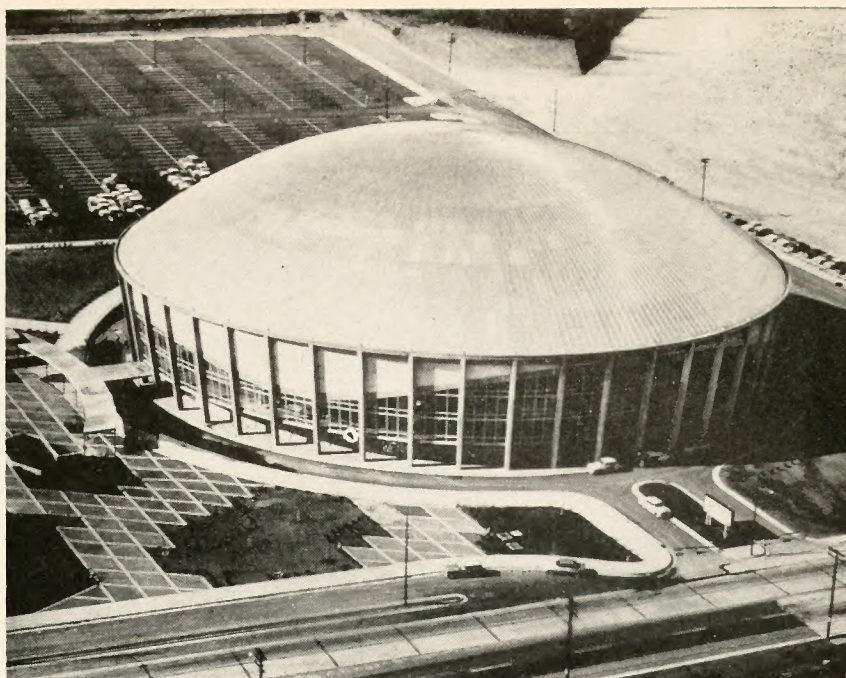
Other electronic plants which have been located in North Carolina since World War II are numerous. They include three plants of National Carbon; two plants of International Resistance of Philadelphia; a huge Westinghouse meter plant at Raleigh; two Cornell-Dubilier plants; the Sylvania Electric Products Cabinet plant at High Point; the Sprague Electric Company plant at West Jefferson; the Hammerlund Manufacturing Company plant at Mars Hill; the Superior Cable Company plant at Hickory, and others.



The textile industry has been important in North Carolina for more than a century. But the founders never could have imagined either the size or the complexity of the Tar Heel textile industry as it is today. Huge installations of textile factories in the past few years have included the Manhattan Shirt Company at Lexington; the Berkshire Knitting Mill at Andrews; the American Thread Company at Sevier; and the Hatch Mill Division of Deering, Milliken and Company at Columbus.

And then—as every Tar Heel as well as every textile man already knows—North Carolina is the home of huge Burlington Industries. This company has plants all over the world. But nowhere else can there be found as many of them as the 37 located in Burlington's own home state.

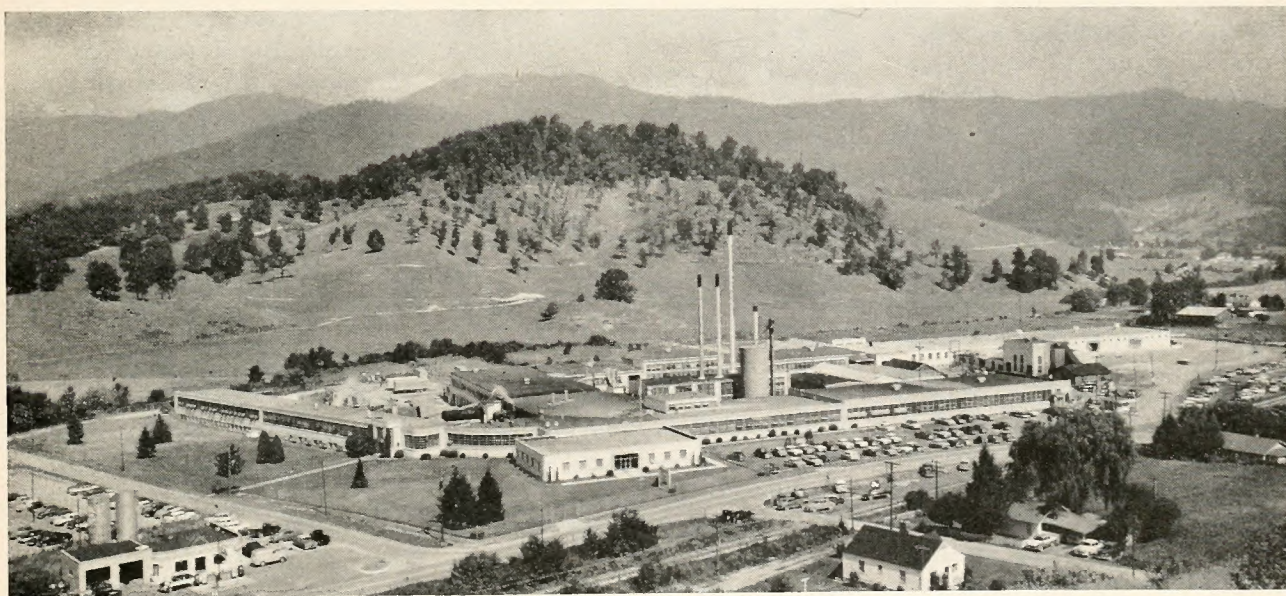
The Saco-Lowell Shops at Sanford manufacture textile machinery, as well as items of precision production for the armed forces. Talon, Inc. has a plant at Stanley and another at Woodland, making zippers. The Timme Corporation at Wilmington, with



At State College North Carolina has one of the nation's foremost schools of architecture and throughout the State are some of the most modern buildings to be found in the country. Among them is this 13,500 seat coliseum at Charlotte, said to have the largest clear span dome in the world.

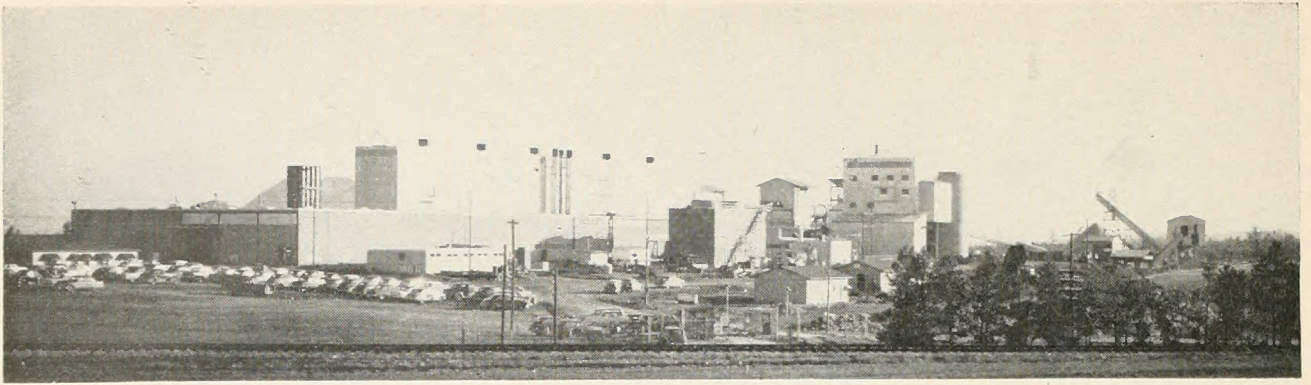
400 employees, is another new installation. One of the largest recent additions is the world's first plant for making Dacron polyester fiber at Kinston built by the E. I. duPont de Nemours Company and employing 2,000 people.

The selection of North Carolina by textile and allied plants is by no means uninfluenced by the fact that the manufacturers have "one of their own" as Governor of North Carolina. Governor Hodges formerly was Vice



In the heart of the textile and furniture industries in North Carolina, The Dayton Rubber Company operates one of their modern streamlined plants. Built in 1941 at Waynesville—the gateway to the smokies—this plant was established to make natural and synthetic rubber products for textile spinning and weaving. In 1949 Dayton Koolfoam Pillows were added, and a few years later Dayton Koolfoam Furniture Cushioning.





An important mineral-based industry in North Carolina is the multi-million dollar processing plant of Lithium Corporation of America at Bessemer City. There is considerable prospecting activity today, particularly in the field of rare earths.

President in charge of Marshall Field Textile Manufacturing and sales throughout the country and he is thoroughly familiar with all phases of the industry.

An expanding industry to which North Carolinians point with pride is the Dayton Rubber Company plant at Waynesville—"the gateway to the great Smokies"—which makes natural and synthetic rubber products for the textile industry and "Koolfoam" cushions for the furniture industry, as well as pillows.

A big and important new textile plant is that built by the Celanese Corporation at Charlotte. Not so new to North Carolina but as modern as tomorrow is the big American Enka installation in the mountains near Asheville.

#### **In All Sections**

All these new industries, and many others are to be found all over North Carolina. Some sections may be found more advantageous to one industry than to another. But the whole State is a fertile field. In this connection it is interesting to note that General Electric built one plant in a mountain city in the Western part of the State, one at the Eastern edge of the mountains, one in the rolling Piedmont

country, and another on the Coastal Plains. These plants are approximately one hundred miles distant from the other—the one farthest west being three hundred miles from the one farthest east.

The blanketing of the State with industry from the mountains to the sea is a comparatively new trend. It was made possible by improved accessibility.

#### **Transportation**

The State is crossed by the main, north-south lines of three class One railroads—the Southern, the Seaboard and the Atlantic Coast Line. The Southern traverses the State from east to west; while the Norfolk Southern serves a great part of eastern North Carolina and goes as far west as Charlotte. North Carolina is also served by several smaller railroads.

North Carolina is the trucking center of the South Atlantic. Tractor-trailer trucks, representing some of the biggest lines in the country, run on daily schedule from all parts of North Carolina to all sections of the country east of the Mississippi. Modern highways, including many four-lane, super highways have made this development possible. And the State's construc-

tion of such highways continues at an ever-increasing pace.

#### **Two Major Ports**

Ocean and coastal transportation from North Carolina's two major ports is growing steadily. The State itself has created a Port Authority and constructed modern docks at Wilmington and Morehead City. These public docks, alone, handled some 300,000 tons of freight during 1956. In addition, many other thousands of tons moved across privately owned docks.

Also in the field of transportation are the huge pipelines which bring both natural gas and gasoline into North Carolina from the deep South. Many industries have converted to natural gas within the past few years. And though the gasoline pipelines are in constant use, the amount of gasoline and fuel oil which reaches North Carolina through its ports grows steadily, year by year.

Major airlines serve all sections of North Carolina. Airports are being enlarged year by year. There are few states in the union which are easier to reach. Many industrial executives leave North Carolina in the morning, do a day's work in New York and are back at home by night-fall.



# The Tar Heel Development Team

North Carolina's new approach to the development of modern industry—both large and small—is the work of a team which operates throughout the State.

Probably never before have so many leaders in diversified fields of endeavor worked together so harmoniously to make theirs a better state in which to live, to work and to invest.

Governor Hodges, with his extensive background in industrial management and sales promotion and private enterprise, is North Carolina's number one developer. Working with him as a team, members of which are both individual and corporate. The team includes the division of commerce and industry of the State Department of Conservation and Development, North Carolina Business Development Corporation, half a dozen regional development corporations, 59 local industrial development cor-



Demonstrating his great interest in industrial development, Governor Luther H. Hodges (right) confers with famed aircraft builder Donald Douglas about locating a new plant in Charlotte. The new North Carolina unit will manufacture guided missiles.

porations, 139 Chambers of Commerce, power and transportation company industrial development specialists, engineering firms, and more than a hundred banks and financial institutions. On the team are State tax specialists, scientists and engineers of the three triangle universities, bankers and businessmen who not only are seeking new industry but also stand ready to help new industry with its financial problems.

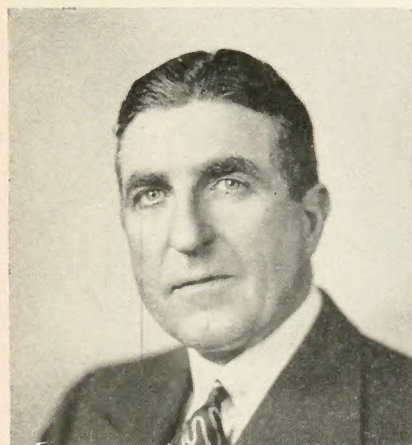
The Tar Heel approach is not to offer industrial prospects a "handout"—in land, money or taxes. Industry seeking something for nothing probably would never feel at home in a state which believes in giving a dollar's worth of work for every dollar received; a state which follows the "do-it-yourself" road to progress. But the North Carolina team is always ready to help

new industry with its problems, including its financial problems, by investments in stock or plant, and by making long-term loans to private enterprise with vision and character.

## Development Corporations

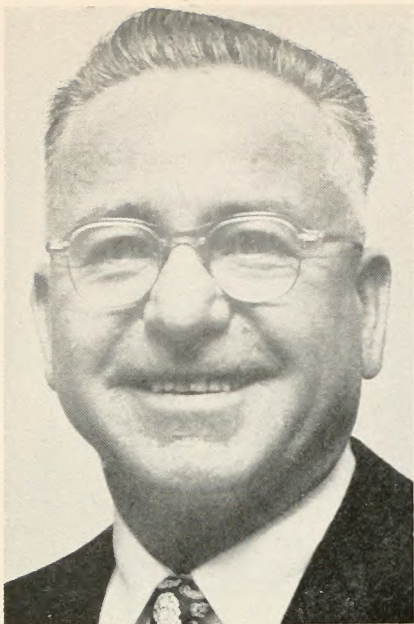
Many of the industrial development corporations mentioned are located in small cities and towns. Their particular goal is the development and attraction of small industry. Working with them in this endeavor are the Division of Commerce and Industry and its recently created new Small Industry Section.

The North Carolina Business Development Corporation is another brainchild of the Hodges administration but it is strictly a private business. The corporation, with headquarters in Raleigh, has a capital stock of a million dollars subscribed by individuals, banks and business



A top North Carolina developer is Robert M. Hanes, who heads the commerce and industry committee of the State Department of Conservation and Development. Mr. Hanes retired recently as President of Wachovia Bank & Trust Company of Winston-Salem. He is a former President of the American Bankers Association.





Supervising North Carolina's industrial development program is William P. Saunders, Director of the Department of Conservation and Development. Like Governor Hodges, who brought him into State service, Director Saunders is a retired manufacturer who knows the problems and needs of industry.

and industrial enterprises. Because member corporations obligate themselves to make additional funds available to BDC, the corporation already has more than \$3,000,000 available for industrial loans and expects to increase the amount to around \$10,000,000 within the very near future.

But in its first few months of operation, the corporation made 22 industrial loans for a total of \$991,065—the individual loans ranging in size from \$3,000 to \$150,000. Richard A. Bigger of Charlotte is president of BDC and Powell Jenkins, a North Carolinian formerly with the Small Business Administration in Washington, is the executive vice president.

BDC operates on a state-wide basis while the 58 industrial development corporations are active only within their immediate

areas. In a number of instances, however, they cooperate financially in the development of new small industries seeking plants or long-term loans.

"Our corporation fills a gap," said Jenkins. "Big business usually can get capital but that's not always the case with small business . . . We are especially interested in helping to create a new industry, or to expand an existing industry thereby creating new jobs and income."

### The Tax Structure

A North Carolina industrial asset frequently misunderstood—even to the point of being misconstrued as a liability—is the combined state and local tax structure. To a greater extent than in any other commonwealth, the State has taken over the complete basic support of the public schools and the building and maintenance of secondary as well as main highways. That has increased the efficiency and economy of school and high-

way administration. It also, of course, has increased certain state taxes. But at the same time it has resulted in a decrease of county, district and municipal levies.

Concerning the Tar Heel tax picture, the "Manufacturer's Record," after making its own survey, recently made this statement: "The over-all tax package is quite favorable to North Carolina . . . One of the factors that is of prime interest is that the industrialist can discuss his tax problems at top level and get the answers not only from the man who collects the taxes, but also from the man who is in charge of spending the money thus collected."

All of which explains why tax specialists are members of the North Carolina industrial development team.

In the meantime, the tax picture, already favorable as a whole, is being further moder-



If you want detailed data about sites in North Carolina, you will find the State's development team geared for prompt and effective action. Here Chief Development engineer Alfred H. Grant, (seated left) confers with members of his staff. The Development Department is headed by William Saunders with Ed Kirk as Assistant Director.



nized. Governor Hodges, on authority granted him by the Legislature, created a tax study commission to recommend provision of the State tax structure to the 1957 Legislature. In its report this commission recommended a modernization of the State's taxes expected to be favorable to further industrial development.

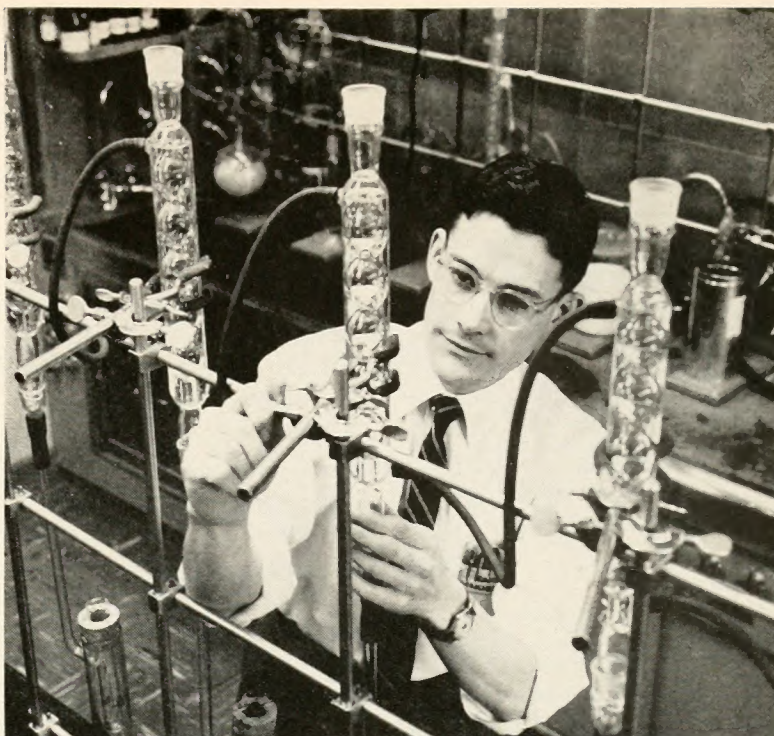
### **Treatment of "Prospects"**

Here is what the magazine, "Industrial Development," recently had to say about North Carolina's treatment of its industrial prospects.

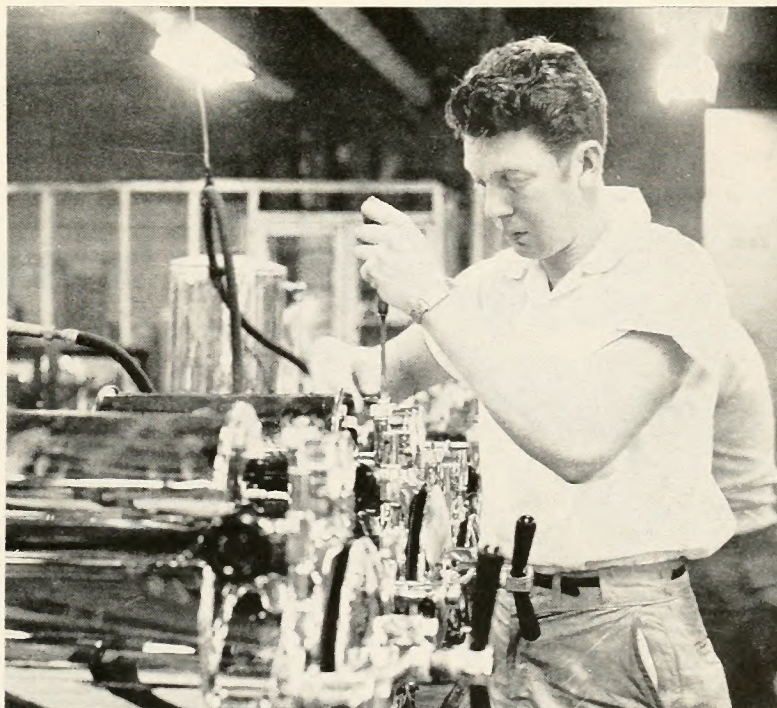
"The team that meets the visiting industrialist who is planning a factory of any magnitude in North Carolina is a top-level group of experienced business executives. The visitor is given the standard, red carpet, VIP treatment to an extent, but the meat of the Department of Conservation and Development salesmanship plans is to supply information 'direct from the horse's mouth.'

"The device used to impart this information quickly and effectively is to have a series of small luncheons and dinner parties. In addition to the guest of honor, these are attended by Director W. P. Saunders and Chief Development Engineer A. H. Grant. If possible, Governor Hodges will drop in for at least one of these sessions. These men have considerable knowledge of the problems and requirements of almost any industry you could name.

"They do not, however, depend upon generalized knowledge. Assuming the industrialist is interested in finances or financing, he will meet Robert M. Hanes, recently retired as president of the largest bank in the Southeast. Mr. Hanes is present at

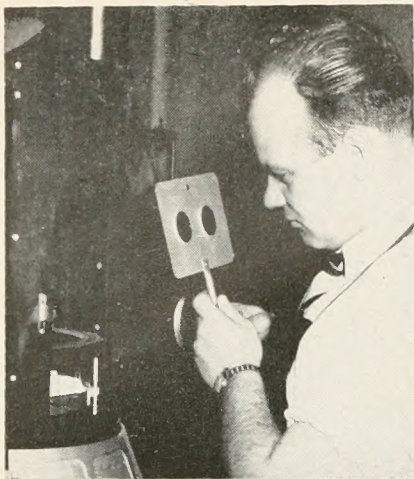


Typical of the young scientists who now chart North Carolina's industrial future in scores of labs throughout the State is Earl McKisson, chemist in DuPont's Kinston laboratory. The three institutions which make up the Research Triangle graduate an ever increasing number of young scientists and engineers each year. And most of these young men indicate a preference to remain in the State whenever they find the opportunity to practice their profession.



Many North Carolina industries are relatively small technical operations which have sprung up in recent years to serve highly specialized markets. Technician here checks professional equipment manufactured by Pulton and Crane in Charlotte. In addition to training scientists and engineers with college degrees, North Carolina has launched a new program of providing technicians with more training than they can find in high schools.





Researcher in Burlington's Quality Control lab in Greensboro uses "fadeometer" to subject fabrics in a few hours to light equivalent to months of normal exposure.

most of such sessions, in point of fact, not only because every visitor is interested in finance, but also because he is chairman of the Committee of Commerce and Industry for the Department of Conservation and Development.

"There are few states where the idea of fostering industrial development is backed by such unanimity of opinion as in North

Carolina. Members of the Industrial Development team of researchers talked with the top-most financiers and they talked with the farmers, and with the fishermen of the Albemarle section. The answer was always the same, although couched in different phraseology: 'We want and welcome industry in North Carolina.' Experience has shown that this is by no means lip service, either.

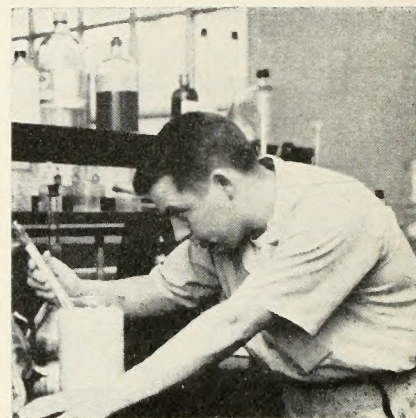
"The banks of North Carolina are all members of this development team. The State today has 433 state banks and branches, and 93 national banks and branches. It is the Southern capital of the insurance business. The banks and insurance companies together with a number of building, savings and loan associations, give the State impressive financial resources. Aggregate resources of all financial institutions have more than tripled in the past ten years."

It is worth noting that the man who wrote those paragraphs, after he and his colleagues have undertaken a thorough

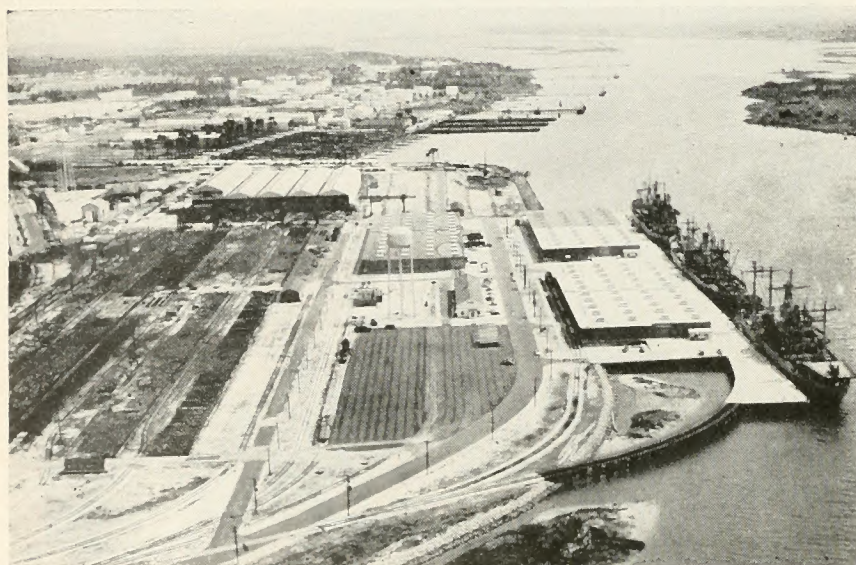
study of North Carolina's industrial opportunities, is neither a resident nor a native of the State.

### God-Given and Man-Made

It would be both false and foolish to say that North Carolina offers everything that any new or expanding industry might want. Neither Governor Hodges nor any of his team



Constant research has made Champion Paper & Fiber Corp. a pioneer in the bleaching of wood pulp. The company's plant at Canton was first to make white pulp from chestnut; first to manufacture bleached hardwood pulp by sulphate processes; and first to produce high quality white pulp from southern pine profitably.



Deep water transportation to the markets of the world are accessible to North Carolina industries through the modern State-owned port facilities at Wilmington (above) and Morehead City. Several important new industries have been attracted by these facilities in recent months.

makes any such claim. They know, and are quick to point out, that North Carolina is a state which is moving forward and upward, not a state which already has arrived at the summit. It is a state for growth; not a state in which to rest and leisurely contemplate the past.

But the Governor and his fellow members of the development team do contend—and will undertake to prove—that the balance of God-given and man-made resources which North Carolina does offer is not surpassed anywhere under the sun.

*And, finally, the visitor most welcomed by North Carolinians is the man who comes to find out the facts for himself.*



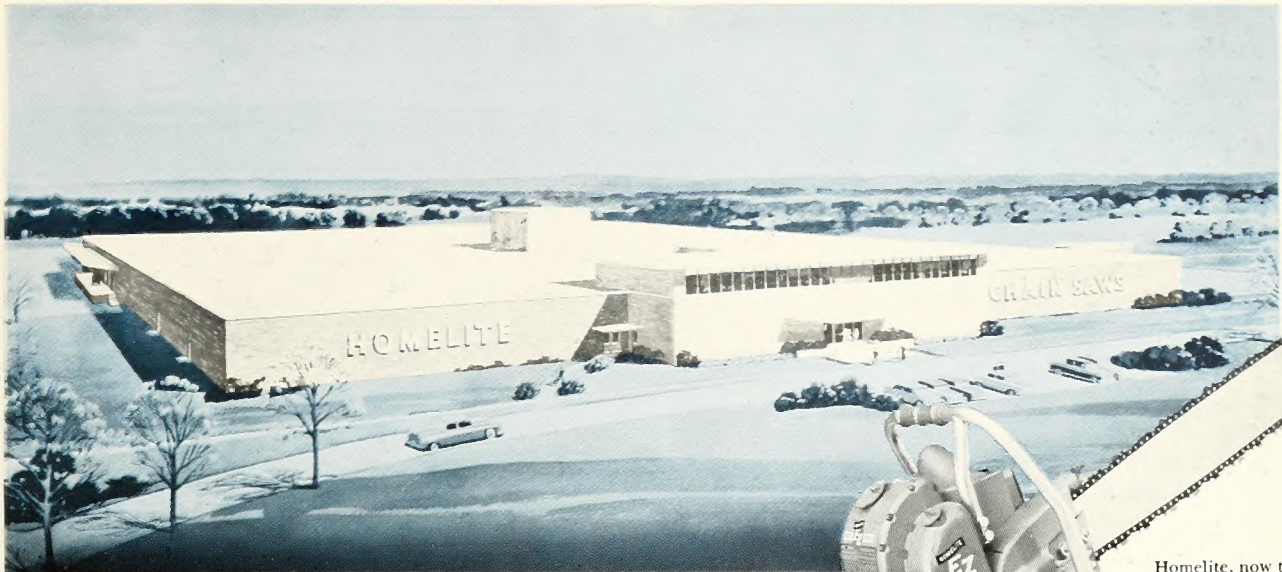
**THIS  
CHECK  
LIST  
BROUGHT**

PERFORMANCE • DEPENDABILITY  
**HOMELITE**  
SERVICE

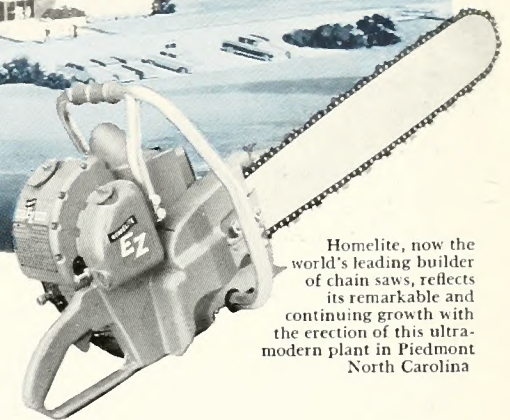
a division of Textron Inc.

TO

# NORTH CAROLINA



Homelite's new plant scheduled for completion in 1957



Homelite, now the world's leading builder of chain saws, reflects its remarkable and continuing growth with the erection of this ultra-modern plant in Piedmont North Carolina

## These Considerations were "Musts". . . and North Carolina rated Tops:

### LABOR

- Ample supply of skilled and unskilled workers available
- High productivity potential
- Favorable wage-output relationship

### TRANSPORTATION

- Convenient air traffic center
- Main trunkline railway
- Adequate trucking facilities

### GEOGRAPHIC LOCATION

- Near the center of company's primary market area
- Readily accessible from Home Office
- Favorable year-around climate

### REGIONAL MARKET

- High potential sales volume in area selected

### LOCAL COMMUNITY'S ATTITUDE

- Active industrial diversification program
- Approval by local industries
- Interested cooperation of city government

### LONG-RANGE OUTLOOK

- Stability of state and local governments
- Economic climate conducive to future expansion and investment

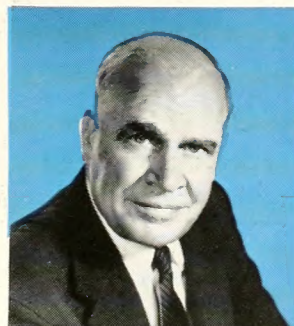
As an important member of Textron's family of diversified industries, Homelite shares with North Carolina the conviction that *diversification is the basis of a sound, healthy economy.*

Using the checklist (left) as a guide, and without pressure or time-wasting travel, North Carolina's Department of Conservation and Development collaborated closely with Mr. R. C. McDonald, V.P. Homelite Manufacturing, and Ford, Bacon & Davis, Engineers, in their successful search for a desirable site.

Together with its many natural advantages and favorable tax situation, North Carolina offers you the understanding and know-how of practical

businessmen in its government . . . ready to work with industry seeking long-range expansions within the areas of sound industrial development.

To start the wheels turning, in strict confidence, write or wire Wm. P. Saunders, Director, Department of Conservation and Development, Raleigh 4, North Carolina.



LUTHER H. HODGES

North Carolina's businessman Governor invites you to send for NEW booklet about Pace-Setting North Carolina.

**NORTH CAROLINA**  
YEAR 'ROUND MID-SOUTH

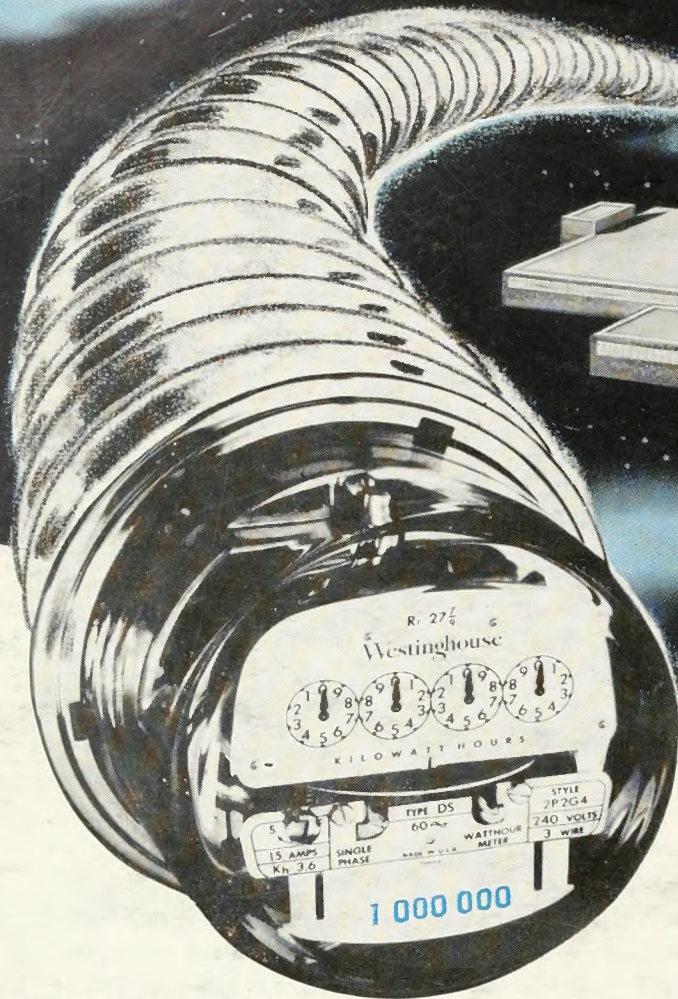


*"Frankly, this production record is somewhat remarkable..."*

J. A. BABCOCK

North Carolina Plant Manager

WESTINGHOUSE ELECTRIC CORPORATION



ANOTHER EXAMPLE  
OF TRAINABLE  
LABOR IN  
**NORTH CAROLINA**

Westinghouse Electric Corporation chose North Carolina in 1952 for a watt-hour meter plant location. The electric meter is as accurate as a fine watch.

Obviously, capable workmanship is essential. A preliminary survey assured Westinghouse of an ample supply of satisfactory recruitable labor. Over 60% of the responses were from people under 35 years of age — a number sufficient for long-range needs; 75% of all respondents had attended high school or college. Almost all, male and female, indicated a willingness to take training courses.

Westinghouse operations here started in 1953. In less than two years the one-millionth meter was produced. The record of efficiency in this important plant shows the abilities of North Carolina workers. Plant Manager J. A. Babcock says: *"Frankly, this production record is somewhat remarkable in view of the fact that the majority of our employees had never before worked in industry. Their ability to adapt to training in learning industrial skills has been a highly rewarding experience to all concerned."*

A great pool of healthy workers — over 99% native-born, eager to work — is one of many important advantages to industries locating and expanding in North Carolina.

See how your company can fit into the prosperous growth picture of North Carolina. For additional information, wire or write William P. Saunders, Director, Department of Conservation and Development, Raleigh 12, North Carolina.

**Businessman Governor**



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**NORTH CAROLINA**  
YEAR 'ROUND MID-SOUTH